

What is claimed is:

(Claim 1) 1. A bumping process of a LED device, comprises:
providing a wafer having a plurality of LED chips thereon, wherein each of the LED chips comprises a plurality of electrodes;
forming an UBM (under bump metallurgy) layer on each of the electrodes;
forming a plurality of posts on the under bump metallurgy layers by a printing process; and
reflowing the posts.

(Claim 2) 2.The bumping process of claim 1, further comprises disposing a pattern plate having a plurality of openings on the wafer before the printing process, wherein the UBM layers located on the electrodes are exposed by the openings of the pattern plate.

(Claim 3) 3.The bumping process of claim 2, wherein the printing process comprises:
applying a solder material onto the pattern plate; and
filling the solder material into the openings of the pattern plate by a scraper.

(Claim 4) 4.The bumping process of claim 3, wherein after filling the solder material into the openings of the pattern plate, the printing process further comprises removing the pattern plate to form the posts and the solder material in the openings turns into the plurality of the posts.

(Claim 5) 5.The bumping process of claim 1, wherein a material of the solder posts comprises Sn/Pb alloy.

(Claim 6) 6.The bumping process of claim 1, wherein a material of the solder posts is selected from the group consisting of tin (Sn), silver (Ag), copper (Cu) and alloys thereof.

(Claim 7) 7.The bumping process of claim 1, wherein the step of forming the UBM layers comprises performing electroless plating.

(Claim 8) 8.The bumping process of claim 1, wherein a material of the UBM layer is selected from the group consisting of titanium (Ti), tungsten (W), Chromium (Cr), Nickel (Ni), Copper (Cu), gold (Au) and alloys thereof.